

REMARKS

Claims 1-36 are pending in the application. Claims 1, 8, 16, 23, 31, and 35 are independent. By the foregoing Amendment, claims 1-3, 5, 7, 8, 10, 12, 16-18, 23-25, 28, 30-33, 35, and 36 have been amended. The Specification has been amended. These changes are believed to introduce no new matter and their entry is respectfully requested.

Objection to the Specification

In the Office Action, the Examiner objected to the Specification citing that the reference numbers in paragraph [0036] should be corrected as well as the transposed numerals on 09/814,646 described in paragraphs [0032], [0036], and [0038]. By the foregoing Amendment, Applicant has corrected the reference numbers to accommodate the Examiner. Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the objection to the Specification.

Rejection of Claim 32 Under 35 U.S.C. §112, Second Paragraph

The Examiner rejected claim 32 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter the Applicant regards as the invention. By the foregoing Amendment, Applicant has amended claim 32 to accommodate the Examiner. Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection to claim 32.

Rejection of Claims 1, 4-6, 8-11, 23-24, 27-28, 31-32, and 35-36 Under Obviousness-

Type Double Patenting

In the Office Action, the Examiner rejected claims 1, 4-6, 8-11, 23-24, 27-28, 31-32, and 35-36 under obviousness-type double patenting as being unpatentable over claims 26-28 of U.S. Patent No. 6,717,965 to Hopkins II, et al. (hereinafter "Hopkins") in view of U.S. Patent No. 6,754,243 to Missey is (hereinafter "Missey"). Double patenting may exist between an issued patent and an application filed by the same inventive entity, or by an inventive entity having a common inventor with the patent, and/or by the owner of the patent. See MPEP §804I.A. If there is an alleged conflict between claims in a patent application and an issued patent, if the claims in the patent application are different from the claims in the issued patent, and if there is no common assignee or inventor between the patent application and the issued patent, then a double

patenting rejection in inappropriate. *See* MPEP §804 CHART II-B. Applicant respectfully traverses the rejection.

In the Office Action, the Examiner cites Missey as a basis for the obviousness-type double patenting rejection. Applicant respectfully submits that there is no common assignee or inventor between Missey and the present application and therefore that using Missey as a basis for the obviousness-type double patenting rejection is improper. Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the double patenting rejection of claims 1, 4-6, 8-11, 23-24, 27-28, 31-32, and 35-36.

Rejection of Claims 1-36 Under Obviousness-Type Double Patenting

In the Office Action, the Examiner rejected claims 1-36 under obviousness-type double patenting as being unpatentable over claims 26-28 of U.S. Patent No. 6,788,724 to Sell, et al. (hereinafter "Sell") in view of Missey. Applicant respectfully traverses the rejection.

In the Office Action, the Examiner again cites Missey as a basis for the obviousness-type double patenting rejection. Applicant respectfully submits that there is no common assignee or inventor between Missey and the present application and therefore that using Missey as a basis for the obviousness-type double patenting rejection is improper. Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the double patenting rejection of claims 1 -36.

Rejection of Claims 1, 4, 8-9, 23-24, 27, 31-32, and 35 Under 35 U.S.C. §102(e)

The Examiner rejected claims 1, 4, 8-9, 23-24, 27, 31-32, and 35 Under 35 U.S.C. §102(e) as being anticipated by Missey. A claim is anticipated only if each and every element of the claim is found in a reference. (MPEP §2131 citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987)). The identical invention must be shown in as complete detail as is contained in the claim. *Id. citing Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989)). Applicant respectfully traverses the rejection.

In the Office Action, the Examiner asserts that Missey discloses an optical apparatus comprising a tuning element 16 positioned in a light beam and a drive element 24 magnetically

coupled to said tuning element. Applicant respectfully submits, however, that the collimating lens 16 in Missey is not an etalon as recited in amended claims 1, 8, 23, 31, and 35. As such, Missey fails to teach the identical invention as recited in claims 1, 8, 23, 31, and 35. Applicant respectfully submit that Missey therefore does not anticipate claims 1, 8, 23, 31, and 35 and that claims 1, 8, 23, 31, and 35 are thus patentable over Missey. Applicant respectfully submits that claims 4, 9, 24, 27, and 32 properly depend from patentable claims 1, 8, 23, 31, or 35. Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection of claims 1, 4, 8-9, 23-24, 27, 31-32, and 35.

Rejection of Claims 1, 4, 8-9, 23-24, 27, 31-32, and 35 Under 35 U.S.C. §102(b)

The Examiner rejected claims 1, 4, 8-9, 23-24, 27, 31-32, and 35 Under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,999,546 to Espindola et al. (hereinafter "Espindola"). Applicant respectfully traverses the rejection.

In the Office Action, the Examiner asserts that Espindola discloses an optical apparatus comprising a tuning element 11 positioned in a light beam (from laser pump 19), and a drive element (magnetic solenoid 18) magnetically coupled to the tuning element. Applicant respectfully submit, however, that element 11 in Espindola is not an etalon, as recited in amended claims 1, 8, 23, 31, and 35. Instead element 11 in Espindola is a reflector, such as a Bragg grating. As such, Espindola fails to teach the identical invention as recited in claims 1, 8, 23, 31, and 35. Applicant respectfully submits that Espindola therefore does not anticipate claims 1, 8, 23, 31, and 35 and that claims 1, 8, 23, 31, and 35 are thus patentable over Espindola. Applicant respectfully submits that claims 4, 9, 24, 27, and 32 properly depend from patentable claims 1, 8, 23, 31, or 35. Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection of claims 1, 4, 8-9, 23-24, 27, 31-32, and 35.

Rejection of Claims 1-5, 7-10, 12-18, 20-28, and 30-36 Under 35 U.S.C. §103(a)

The Examiner rejected claims 1-5, 7-10, 12-18, 20-28, and 30-36 under 35 U.S.C. §103(a) as being unpatentable over by U.S. Patent No. 6,108,355 to Zorabedian et al. (hereinafter "Zorabedian") in view of Missey. To establish a *prima facie* case of obviousness, an Examiner must show three things (1) that there is some suggestion or motivation to modify a reference or combine reference teachings to arrive at the claimed invention and (2) that the references teach or

suggest each and every element of the claimed invention, and (3) that there is a reasonable expectation of success. *See* MPEP §2143. The proposed modification cannot render a reference unsatisfactory for its intended purpose or change its principle of operation. *See* MPEP §2143.01. Applicant respectfully traverses the rejection.

Zorabedian appears to be directed to a tunable external cavity laser (ECL) that may be tuned by moving an etalon across the path of an optical beam in the vertical direction. Missey appears to be directed to a system that includes a tunable distributed feedback (DFB) laser array. Each laser in the laser array emits an optical signal having a fixed wavelength. A lens positioned in the path of the optical signals is moved in a horizontal direction to focus one of the optical signals into an optical fiber.

In the Office Action, the Examiner asserts that Zorabedian discloses an optical apparatus comprising a tuning element positioned in a light beam, and a drive element 160 driving the tuning element so that it translates up and down relative to the beam. The Examiner concedes that Zorabedian fails to disclose a drive element magnetically coupled to a tuning element, but cites Missey for teaching that a magnetic actuation may be done to translate an element up and down relative to the beam. The Examiner then concludes that it would have been obvious to use magnetic actuation as an alternative means for translation of the tuning element, as taught by Missey. Applicant respectfully disagrees.

Applicant respectfully submits that Missey is not properly applied to the claimed invention. For example, the claimed invention is directed to external cavity lasers (ECL) while Missey is directed to distributed feedback (DFB) lasers. DFB lasers are limited to only a single channel or a small number of adjacent channels while ECLs are usable over a wide range of channels. Applicant respectfully submits that one would not combine a DFB laser system with an ECL system.

Applicant respectfully submits further that a person of ordinary skill in the relevant art would not combine Zorabedian with Missey because the combination would make Zorabedian unsatisfactory for its intended purpose or change Zorabedian's principle of operation. For example, in Zorabedian the optical element (etalon) is moved across the path of a single optical

beam to change the lasing wavelength of the ECL. In contrast, in Missey the optical element (lens) is moved across the path of several optical signals to select which optical signal will be coupled into the optical fiber. Moving the optical element in Missey does not change the lasing wavelength of the DFB lasers. Each DFB laser in the array maintains its lasing wavelength and the lens merely directs one of the beams to the optical fiber. Applicant respectfully submits therefore that the combination of Zorabedian and Missey is prohibited by MPEP §2143.01 and thus cannot form a basis for an obviousness rejection. Because the combination of Zorabedian and Missey cannot form a basis for an obviousness rejection Applicant respectfully submits that the Examiner has not made out a prima facie case of obviousness of claims 1-5, 7-10, 12-18, 20-28, and 30-36 over Zorabedian in view of Missey. Applicant respectfully requests that the Examiner reconsider and remove the rejection to claims 1-5, 7-10, 12-18, 20-28, and 30-36.

Applicant respectfully submits further that with respect to claims 2, 7, 12, 25-26, 30, 33, and 36 that the Examiner must provide the basis for the statement that including elements in a hermetically sealed housing is well known. For example, it is not clear whether the Examiner is taking Official Notice or is relying on the Examiner's Personal Knowledge. In either case, Applicant respectfully requests that the Examiner provide evidence, such as an *Affidavit*, to support the conclusion that it is well known to enclose an etalon and a magnetic element within a hermetically sealed enclosure. Absent being provided with an Affidavit, Applicant respectfully requests that the Examiner reconsider and remove the rejection of claims 2, 7, 12, 25-26, 30, 33, and 36.

Applicant respectfully submits that with respect to claims 3, 17, and 24 that the Examiner must provide the basis for the statement that in order to achieve the magnetic actuation contemplated in Missey, magnetic elements must be included and that magnetic elements would necessarily be located on the element to be translated so that the translated tuning element may actually be translated magnetically. It that the Examiner is asserting that such teaching is implicit in the disclosure of Missey. If this is the case, then to establish inherency *the Examiner must provide extrinsic evidence* that the missing descriptive matter is necessarily present. See MPEP §2112IV. Applicant respectfully requests that the Examiner provide evidence to support the conclusion that that in order to achieve the magnetic actuation contemplated in Missey, magnetic

elements must be included and that magnetic elements would necessarily be located on the element to be translated so that the translated tuning element may actually be translated magnetically as asserted by the Examiner. Absent being provided with supporting extrinsic evidence, Applicant respectfully requests that the Examiner reconsider and remove the rejection of claims 3, 17, and 24.

Applicant respectfully submits further that with respect to claims 13-15 and 20-22 the Examiner provide the basis for the statement that enclosing a carbon drain, inert atmosphere, and a moisture trap inside a hermetically sealed housing is well known. It is not clear whether the Examiner is taking Official Notice or is relying on the Examiner's Personal Knowledge. In either case, Applicant respectfully requests that the Examiner provide evidence, such as an *Affidavit* to support the conclusion that it is well known to enclose a carbon drain, inert atmosphere, and a moisture trap inside a hermetically sealed housing is well known. Absent being provided with extrinsic evidence, Applicant respectfully requests that the Examiner reconsider and remove the rejection of claims 13-15 and 20-22.

Rejection of Claims 6, 11, 19, and 29 Under 35 U.S.C. §103(a)

The Examiner rejected claims 6, 11, 19, and 29 under 35 U.S.C. §103(a) as being unpatentable over Zorabedian and Missey as applied to the claims above and in further view of U.S. Patent No. 6,215,802 to Lunt (hereinafter "Lunt"). Applicant respectfully traverses the rejection.

Applicant respectfully submits that claims 6, 11, 19, and 29 properly depend from patentable claims 1, 8, 16, and 23, respectively. Accordingly, Applicant respectfully submit that claims 6, 11, 19, and 29 are patentable for at least the same reasons claims 1, 8, 16, and 23 are patentable. Accordingly, Applicant respectfully requests that the Examiner reconsider and remove the rejection of claims 6, 11, 19, and 29.

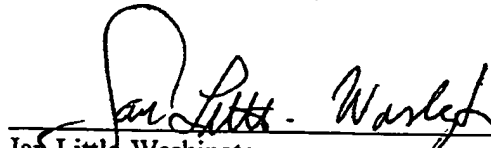
CONCLUSION

Applicant respectfully submits that all grounds for rejection have been properly traversed, accommodated, or rendered moot, and that the application is now in condition for allowance. The Examiner is invited to telephone the undersigned representative if the Examiner believes that an interview might be useful for any reason.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: 1/20/2005



Jan Little-Washington
Reg. No. 41,181
(206) 292-8600

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Adrian Villarreal
Name of Person Mailing Correspondence

 January 20, 2005
Signature Date



Docket No.: 42P14879

Patent

In re the Application of: Brad V. Johnson

(inventor(s))

Application No.: 10/082,579

Filed: February 22, 2002

For: TUNABLE LASER WITH MAGNETICALLY COUPLED FILTER

(title)

Mail Stop Amendment

COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

SIR: Transmitted herewith is an Amendment and Response for the above-referenced application.

Applicant claims small entity status. See 37 CFR 1.27.

XX No additional fee is required.

The fee has been calculated as shown below:

	(Col. 1) Claims Remaining After Amd.		(Col. 2) Highest No. Previously Paid For	(Col. 3) Present Extra
Total Claims	* 36	Minus	** 36	0
Indep. Claims	* 6	Minus	*** 6	0
	First Presentation of Multiple Dependent Claim(s)			

* If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.

** If the "Highest No. Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.

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SMALL ENTITY	
Rate	Additional Fee
X9	\$
X43	\$
+145	\$
Total Add. Fee	\$

OTHER THAN A SMALL ENTITY	
Rate	Additional Fee
X18	\$ 0
X86	\$ 0
+290	\$
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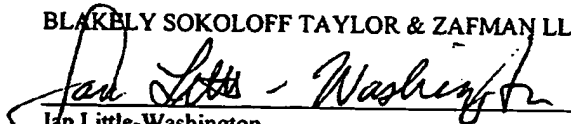
Signature

Date

_____ A check in the amount of \$ _____ is attached for presentation of additional claim(s).
_____ Applicant(s) hereby Petition(s) for an Extension of Time of _____ month(s) pursuant to
37 C.F.R. § 1.136(a).
_____ A check for \$ _____ is attached for processing fees under 37 C.F.R. § 1.17.
_____ Please charge my Deposit Account No. 02-2666 the amount of \$ _____.
_____ A duplicate copy of this sheet is enclosed.
X The Under Secretary of Commerce for Intellectual Property and Director of the United States
Patent and Trademark Office is hereby authorized to charge payment of the following fees associated
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 X Any extension or petition fees under 37 C.F.R. § 1.17.

Date: 1/20/2005

BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP


Jan Little-Washington
Reg. No. 41,181

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(206) 292-8600